

5. **(Amended)** A GPS receiver as defined in Claim 1, wherein the GPS unit outputs an updated ground speed signal at least every second.

9. **(Amended)** The regulator as defined in Claim 1, further comprising:
an operator input controller for varying a selected rate distributor for the agricultural dispenser, the operator input controller and the ground speed signal determining the frequency of the series of pulses.

11. **(Amended)** A regulator for outputting a signal to an agricultural dispenser for applying chemicals to a field or for planting seeds, the regulator comprising:

a GPS unit for outputting a ground speed signal indicative of the velocity of the agricultural dispenser in response to satellite signals;

a converter for converting the ground speed signal to a series of pulses having a frequency indicative of the ground speed signal and outputting the series of pulses to the agricultural dispenser;

the GPS unit and the converter being mounted on a self-propelled vehicle;
and

a wireline electrically interconnecting the converter with the dispenser positioned on a trailered implement.

13. **(Amended)** A GPS receiver as defined in Claim 11, wherein the GPS unit outputs an updated ground speed signal at least every second.

16. **(Amended)** A method of outputting a ground speed signal to an agricultural dispenser for applying chemicals to a field or for planting seeds, the method comprising:

providing a GPS unit for outputting a ground speed signal indicative of the velocity of the agricultural dispenser in response to satellite signals;

converting the ground speed signal to a series of pulses having a frequency indicative of the ground speed signal; and

outputting the series of pulses to the agricultural dispenser.

21. **(Amended)** The method as defined in Claim 15, further comprising:
providing an operator input controller for varying a selected rate distribution for the agricultural dispenser, the operator input controller and the ground speed signal determining the frequency of the series of pulses.